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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,516	12/14/2000	Jukka Tuomi	017.38632X00	5825

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EXAMINER

SEFCHECK, GREGORY B

ART UNIT PAPER NUMBER

2662

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/735,516

Applicant(s)

TUOMI, JUKKA

Examiner

Gregory B Sefcheck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-7,9-12,21 and 22 is/are allowed.
- 6) ☒ Claim(s) 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

- Applicant's Amendment filed 8/5/2004 is acknowledged.
- The amendments to Figs. 3 and 4 filed 8/5/2004 are approved.
- Claims 1, 3-7, 9-13, and 17 have been amended.
- Claims 2 and 8 have been cancelled.
- Claims 21 and 22 have been added.
- Claims 1, 3-7, and 9-22 remain pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung in view of Thornton et al (US006363065B1), hereafter Thornton.

- In regards to Claims 13 and 17,

Cheung discloses a method and computer processor executable instructions for controlling the admission of a VoIP call into a packet network (Col. 2, lines 9-25; Col. 6, lines 35-48; Col. 10, lines 60-64; claim 13/17 – method and computer program for VoIP load management to assure voice quality in a packet network).

Cheung discloses determining a delay characteristic from a calling party to a called party for a new VoIP call and accepting the new call if the determined delay for the call satisfies the delay requirement of the network (Col. 10, lines 38-42; claim 13/17 – allowing access of a new call to the network when the round trip time is less than a predetermined value).

Cheung shows that the total delay of the system can be determined by the timed transmission of audible tones (ping). However, Cheung does not explicitly show transmitting a ping request to the originating gateway by a gatekeeper, transmitting a ping from the originating gateway to the destination gateway, and echoing a reply from the destination to the originating gateway to determine the round trip delay, as specified in claims 13 and 17.

Thornton discloses an apparatus and methods for VoIP telephony gateways. Thornton shows call admission control by the gateways of the network may reference the latency of the network, measured by regularly sending a ping between peer gateways associated with a VoIP call to determine round-trip transmit time (Col. 26, lines 10-14), when determining whether to accept or reject a new call (Col. 15-16; lines 55-10; Col. 30, lines 32+; claim 13/17 – determining a round trip time for the transmitting and echoing of the reply; claim 13/17 – transmitting a ping request to an originating gateway by a gatekeeper; claim 13/17 – transmitting a ping IP address to a destination

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gateway by the originating gateway; claim 13/17 – echoing a reply to the originating gateway by the destination gateway).

It would have been obvious to one of ordinary skill in the art at the time of the invention to determine round-trip delay characteristics in the method and computer program of Cheung by utilizing a ping between the gateways associated with a particular call for measuring round-trip delay, as shown by Thornton. Utilizing a ping between gateways for measuring delay is a well-known, reliable way to measure round-trip delay in a packet network, thereby ensuring voice over IP data is delivered within acceptable time constraints.

- In regards to Claim 14-16 and 18-20,

Cheung discloses a method and computer processor executable instructions for controlling the admission of a VoIP call into a packet network that covers all limitations of the parent claims.

Cheung shows that the determined delay may be an average, median or weighted delay (Col. 4, lines 30-58; claim 14/18 – round trip time is an average of two round trips to and from the originating gateway and the destination gateway; claim 15/19 – round trip time is a second round trip time of two round trips to and from the originating gateway and the destination gateway).

Cheung discloses accepting the new call if the determined delay for the call satisfies the delay requirement of the network or holding (blocking) the call if the determined delay for the call exceeds the network requirements (claim 16/20 – blocking the new call when the round trip time exceeds the predetermined value).

Response to Arguments

3. Applicant's arguments filed 8/5/2004 regarding claims 13-20 have been fully considered but they are not persuasive.

- In the Remarks on pgs. 15-17 of the Amendment, the Applicant contends that the Cheung does not disclose the use of roundtrip delay in the VoIP call control method. The Applicant shows that Cheung's disclosure involves one-way delay between the source and destination of a transmission.
- The Examiner agrees that Cheung's disclosure of "total delay" is defined in one direction. The combination of Cheung, which upon further inspection does suggest the use of a ping in measuring delay (column 4, lines 20-22), with Thornton, which explicitly shows the use of a ping and echo for measuring round-trip delay, is used by the Examiner to show how VoIP call admission control is performed by utilizing a round-trip delay measurement obtained through timed transmission of a ping.

- In the Remarks on pg. 17 of the Amendment, the Applicant contends that the Examiner did not discuss dependent claims 14-16 and 18-20 in the previous office action.
- The Examiner addressed the claim limitations of dependent claims 14-16 and 18-20 in a single rejection that covers all of claims 13-20. The Examiner has addressed these dependent claims separately in this action to avoid further confusion for the Applicant.

Allowable Subject Matter

4. Claims 1, 3-7, 9-12, 21 and 22 are allowed.
5. The following is an examiner's statement of reasons for allowance:
 - Regarding Claims 1 and 7,

The prior art of record does not teach or fairly suggest a method of VoIP load management comprising the generation of a capacity table indicating the maximum number of VoIP calls permitted to a plurality of communication links based on the bandwidth of each communication link and the frames per IP packet.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

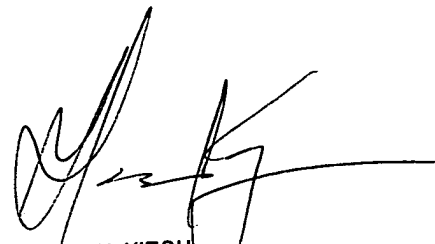
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GBS
12-15-2004



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